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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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801-538-5340

Letter to
10/12/91
11/11/91
11/11/91
1:30 PM

April 2, 1992

Daniel A. Schmit
Project Engineer
Morton Salt
8800 West Morton Lane, AMF Box 22054
Salt Lake City, Utah 84122-0054

Dear Mr. Schmit:

Re: Review of Notice of Intent to Conduct Large Mining Operations, Morton International, Morton Salt-Grantsville, M/045/037, Tooele County, Utah

The Division has completed its review of Morton Salt's November 4, 1991 submittal. The following questions will need to be addressed before final approval can be considered. Each question has been formatted according to the section of the Minerals Rules to which it applies. Please format your response in a similar fashion.

R647-4-105. Maps, Drawings & Photographs

105.2.11 Proposed surface facilities.

(AAG) The location of the Burmester Mill facilities on the surface facilities maps is not clearly identified. Please provide this location by revising the map(s) submitted or by providing a revised map.

(DWH) The Reclamation Site Map shows a 1.53 acre area immediately southwest of the salt stockpiling area where structures will be torn down and removed. What are the structures/facilities located in this area and why will this area not be reclaimed?

(HWS) Please indicate the location of the topsoil stockpiles on the map(s) which depicts the operational phase of mining or on a different map if appropriate.

105.2.12 Border outlining acreage

(AAG/DWH) Please clarify the disturbed acreage breakdown presented in page four of the LMO form by specifying what is included in these figures and which borders on the submitted maps represent these areas. There are two small areas highlighted within the highlighted Property Boundary Base Map. What do these areas represent? Where are the main processing facilities and Burmester mill site area(s) located with respect to the other operational facilities?

105.3 Additional maps, drawings or photographs

(AAG) Morton has provided a 1:250 scale, air photo of the plant site; however, the photo or the area it represents is not referenced on any other drawing or in the text of the notice. Please clarify the relationship of the area photographed with areas shown on the map(s).

(DWH) Morton has provided two (2) detailed design drawings of the Burmester Mill Facility. These drawings are very useful in calculating a reclamation surety based upon structures to be decommissioned and removed. However, the drawings do not show the additional disturbed areas and associated facilities adjacent to the mill, namely the salt storage/stockpiling area(s), and the buildings/structures located just west of the salt storage areas. A supplemental map(s) should be prepared at a scale (e.g., 1 inch = 100 ft.) that shows all of the surface facilities associated with the general processing area. A disturbed area boundary should also be drawn on the map identifying the maximum extent of the affected areas.

(HWS) A more extensive reclamation treatments map needs to be provided. The map should show the entire mine site and be of a scale which can be compared with the operations map. All disturbed areas need to be clearly identified on this map along with the type of reclamation treatments to be applied in each area. This map would also show areas which will not receive any reclamation treatments. These unreclaimed areas should correspond to variance requests submitted.

R647-4-106. Operation Plan

106.5 Description of existing soils

(HWS) More specific information regarding the existing soils which are to be disturbed by mining needs to be provided. General soils information is not sufficient.

106.6 Plan for protecting & redepositing existing soils

(HWS) Please explain how stockpiled topsoil materials will be protected during the interim between storage and reapplication.

106.7 Existing vegetative communities

(HWS) Please provide information concerning the types of plant species growing and the relative cover values for plant communities located on the site. Also provide the methodology used to obtain these values.

(DWH) On page 6A of the NOI, a description of the vegetation reference area is listed as 60 X 80 feet (0.11 acres). The Reclamation Site Map shows the "reference foliage area" at 0.46 acres. If these areas are the same, please clarify which is the correct acreage figure.

106.9 Location & size of ore & waste stockpiles, tailings, & treatment ponds

(AAG) Please indicate the location and approximate size of any stockpiled materials. Item 15 of the LMO form indicates that the UPDES discharge is shown on the facilities map. Please identify this location on the map(s).

R647-4-107. Operation Practices

107.3 Erosion & sediment control

(DWH) Page 4, C.(1)(e) of the UPDES permit, requires Best Management Practices to be developed and implemented within 1 year to control stormwater runoff. A description of these measures should be made part of this NOI.

107.4 Deleterious materials safely removed or isolated

(DWH) Are salt storage stockpile and loadout areas bermed or otherwise graded to limit the potential for offsite salt contamination from storm runoff? If not, this provision should be implemented and be described in the NOI.

R647-4-109. Impact Assessment

109.1 Surface & groundwater systems

(DWH) No description of potential impacts to local/regional groundwater systems is provided in the NOI. Please revise the plan to include a description/projection of the potential groundwater impacts and include supporting documentation justifying the projections.

The established effluent limits/standards for plant processing discharges to the receiving surface waters is not clearly defined in the UPDES permit provided with the NOI. What are the constituents/components of the processing waste water discharge to the Great Salt Lake and where is the approved discharge point on the map(s)?

109.2 Threatened & endangered species or habitats

(HWS) What will be the impacts on wildlife habitat associated with this operation? Are any big game species found in the area? Is the area associated with riparian habitat? If so, what will the impacts be on riparian areas? Is waterfowl associated in some way with this site, either as a flyover, temporary resident or permanent resident? Are there any threatened or endangered species which may be impacted?

109.3 Existing soil resources

(HWS) Explain how the operation might effect existing soil and plant resources in the area of operations. Will existing soils be impacted adversely? Will any riparian areas be impacted? Will the areas impacted be rehabilitated or will the operation result in permanent impacts?

109.5 Actions proposed to mitigate impacts

(HWS) Please provide a description of the actions proposed to mitigate any impacts described above. (Refers to all comments in section 109).

R647-4-110. Reclamation Plan

110.1 Current & post-mining land use

(HWS) What is the current land use and the proposed post-mine land use?

110.3 Surface facilities to be left

(AAG) Some dikes and the Stansbury Island Road will be features to remain after mining ceases, this implies that all other features, including the canals, will be reclaimed. The submittal includes a figure showing the dikes which are to be leveled by Morton. Are all the canals going to be reclaimed in one manner or another? In order for the Division to allow the Stansbury Road and outer dike to remain unreclaimed we require some written proof showing acceptance of these features by the State after the mining operation ceases.

110.5 Planting program

(HWS) Please describe the revegetation plan in more detail. For example, will ripping, mulching, fertilizing, seeding and scarifying of the affected areas be performed? On all areas to be revegetated? Will topsoil be used? If so, to what depth and what type of soil amendments might be used?

(HWS) The Division realizes Morton has committed to use a seed mix acceptable to the Division. In order to provide a seed mix, the Division will need the results of the vegetation survey.

R647-4-111. Reclamation Practices

(DWH) A better description of the procedures to be used by Morton to remove residual salts from the main storage/stockpile areas is requested.

R647-4-112. Variances

(AAG) The Division requires written proof of the State accepting responsibility of the outer dike and the Stansbury Island Road after the mining operation ceases in order to grant variances for these features.

(HWS) The Division will grant a variance for revegetation on areas associated with the salt ponds; however, the entire site cannot receive a blanket variance until justification is provided. Areas for which such a variance is requested should be identified on the reclamation treatments map or some other appropriate map.

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R647-4-113. Surety

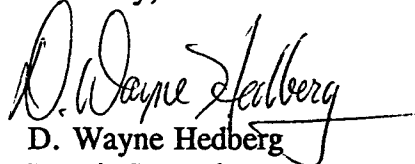
(AAG) The surety estimate provided by Morton is acceptable in general. A correction to the building demolition costs was needed and this has been verified by telephone conversations between the Division and Morton staff. In addition, the Morton estimate will need to include a mobilization cost, then be increased by a 10% contingency and escalated for 5 years. It is Division policy to add a contingency to the estimates to account for fluctuations in estimated costs or other unforeseen circumstances. The Board of Oil, Gas and Mining requested that all surety estimates be escalated for a five year period and reviewed every five years. A revised surety estimate including the changes mentioned above is enclosed.

R647-4-116. Public Notice & Appeals

(AAG) After the Division has completed its final review, a tentative approval will be issued (provided all matters are resolved) and the matter will go into the 30-day public comment phase. Since some BLM lands are involved, the Division will contact the BLM regarding any comment they may have. After or during this phase, the Division will present the amount and form of surety to the Board for approval. In order to present the surety to the Board, a complete and correct Reclamation Contract will be needed from Morton. A copy of the Reclamation Contract and instructions for its completion were previously sent to you enclosed in the draft version of the Division comments.

Thank you for your patience and cooperation in completing this permitting action. Please contact me or Anthony Gallegos of the Minerals staff if you have questions or concerns regarding this review.

Sincerely,


D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Enclosure
cc: Lowell Braxton, DOGM
Steve Brooks, BLM, Pony Express RA
M045037

RECLAMATION ESTIMATE

Morton International, Inc.

Morton Salt - Grantsville Facility

Tooele County

M/045/037

last revision

4/2/92

Prepared by Utah State Division of Oil, Gas & Mining

Reclamation Details***-This estimate may need further revision after review of deficiency response****-All structures & facilities to be demolished/removed**-Six barriers around propane tank removed, tank leased**-Water wells (4 @ 800 ft deep) to be abandoned according to rules**-Dikes highlighted to be leveled to within 1 ft of present pond levels**-All underground gas, water & conduit piping to be excavated & removed**-Water tank excavated & removed; asphalt at mill site removed**-Areas to be ripped & revegetated shown on "Reclamation Site Map"*

<u>Description</u>	<u>Amount</u>	<u>\$/Unit</u>	<u>Cost-\$</u>
Building code 1 demolition	57,778 SF	0.60	34,667
Building code 2 demolition	42,906 SF	1.00	42,906
Building code 3 demolition	322,443 CF	0.21	67,713
Concrete floors demolition	106,547 SF	4.13	440,039
Concrete footings demolition	7,386 LF	11.18	82,575
Rail line removal	1,875 LF	14.20	26,625
Propane tank barriers	1 set	300	300
Water wells	4 wells	3,000	12,000
Dike leveling	19,250 feet	1.36	26,180
Underground piping	1 sum	5,500	5,500
Asphalt removal	23,546 SY	5.80	136,567
Water tank removal	1 tank	2,200	2,200
Ground ripping	26.16 acres	826	21,608
Backfilling	1 sum	5,800	5,800
Revegetation	15.49 acres	1,168	18,092
Haulage and dump fees	1 sum	165,000	165,000
Mobilization	1 sum	2,000	2,000

SUBTOTAL 1,089,773

+ 10% CONTINGENCY 108,977

SUBTOTAL 1,198,750

+ 5 yr ESCALATION(1.27%) 78,079

TOTAL 1,276,829

ROUNDED TOTAL IN 1997-\$ **\$1,277,000**

Avg. cost/acre (160+33=163 acre)= 7,834 \$/acre